Leading the Launch

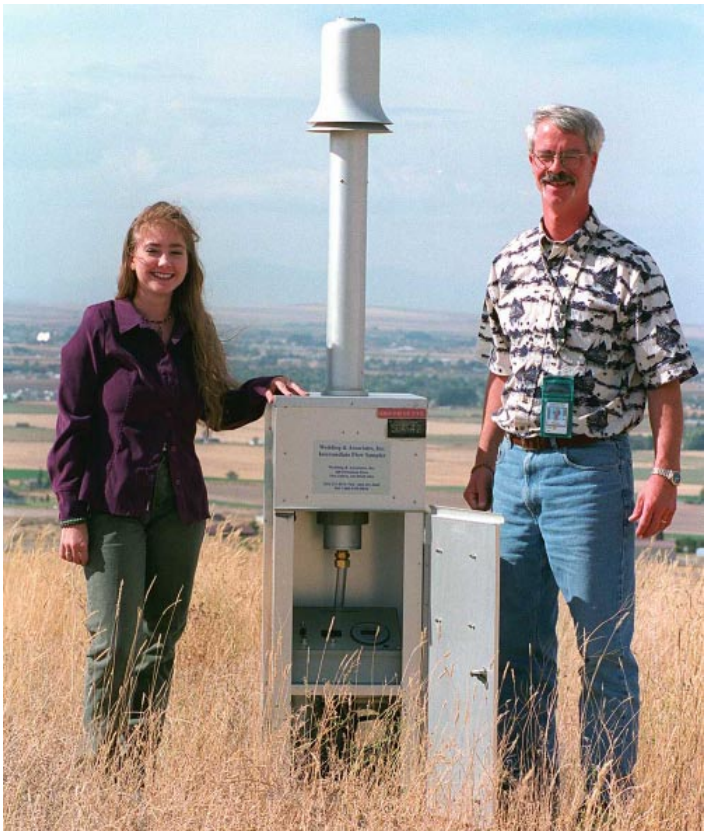
Delivering a payload of responsive technologies

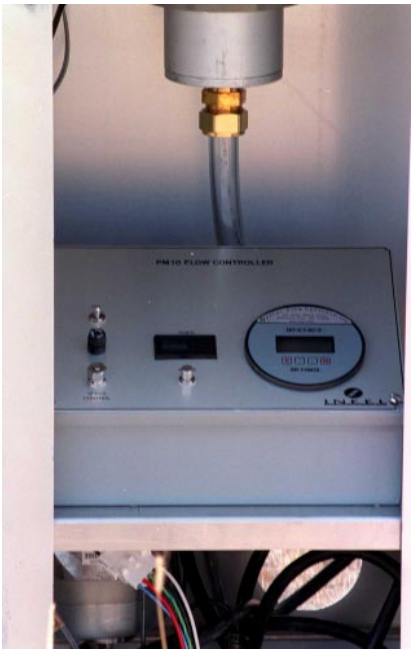
Technology Deployment

IDAHO NATIONAL ENGINEERING AND ENVIRONMENTAL LABORATORY

INEEL

HOME OF SCIENCE AND ENGINEERING SOLUTIONS





Improved PM-10 Air Monitor

Problem
INEEL's Site Wide Monitoring project needed to improve the reliability of particulate monitors.

Baseline Technology
Conventional particulate monitors with constant speed carbon vane pumps.

Innovative Technology
The INEEL-improved PM-10 particulate monitor integrates a variable speed blower and electronic speed controller to maintain constant air flow.

Comparison
The improved system self regulates the monitor's flow rate, and has proven to be more reliable. In contrast, the conventional monitor requires regular field adjustments to maintain constant flow rate and is subject to frequent pump failure.

Benefits
This system enables the project to routinely obtain reliable air quality data for the INEEL.